



Aviation Investigation Final Report

Location: TULE LAKE, California Accident Number: LAX90DXQ03

Date & Time: August 4, 1990, 08:40 Local Registration: N45116

Aircraft: Air Tractor AT-401 Aircraft Damage: Substantial

Defining Event: 1 Minor

Flight Conducted Under: Part 137: Agricultural

Analysis

THE ENGINE QUIT WHEN THE PILOT PULLED UP TO MAKE ANOTHER SPRAY RUN. THE PILOT LANDED IN A FIELD AND COLLIDED WITH A 12 INCH WATER LINE. THE LANDING GEAR COLLAPSED AND THE AIRCRAFT NOSED OVER. EXAMINATION FOUND THE RIGHT MAGNETO MISSING APPROXIMATELY 50 PERCENT OF THE TEETH FROM THE DISTRIBUTOR GEAR.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: AN ENGINE FAILURE DUE TO MECHANICAL FAILURE OF THE DISTRIBUTOR.

Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - MECH FAILURE/MALF

Phase of Operation: MANEUVERING - AERIAL APPLICATION

Findings

1. (C) IGNITION SYSTEM, DISTRIBUTOR - FAILURE, TOTAL

Occurrence #2: ON GROUND/WATER COLLISION WITH OBJECT

Phase of Operation: LANDING

Occurrence #3: MAIN GEAR COLLAPSED Phase of Operation: LANDING - ROLL

Occurrence #4: NOSE OVER Phase of Operation: LANDING - ROLL

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Factual Information

Pilot Information

Certificate:	Commercial	Age:	48,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Center
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medicalw/ waivers/lim	Last FAA Medical Exam:	May 2, 1990
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	6187 hours (Total, all aircraft), 260 hours (Total, this make and model), 6187 hours (Pilot In Command, all aircraft), 260 hours (Last 90 days, all aircraft), 145 hours (Last 30 days, all aircraft), 10 hours (Last 24 hours, all aircraft)		

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Aircraft and Owner/Operator Information

Aircraft Make:	Air Tractor	Registration:	N45116
Model/Series:	AT-401 AT-401	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Restricted (Special)	Serial Number:	401-0752
Landing Gear Type:	Tailwheel	Seats:	1
Date/Type of Last Inspection:	April 12, 1990 Unknown	Certified Max Gross Wt.:	6000 lbs
Time Since Last Inspection:	301 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	301 Hrs	Engine Manufacturer:	P&W
ELT:	Not installed	Engine Model/Series:	R1340 AN1
Registered Owner:	MACY'S FLYING SERVICE INC	Rated Power:	600 Horsepower
Operator:	MACYS FLYING SERVICE INC.	Operating Certificate(s) Held:	
Operator Does Business As:		Operator Designator Code:	MFAG

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:	0°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	21°C
Precipitation and Obscuration:	No Obscuration; No Precipit	ation	
Departure Point:		Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	08:30 Local	Type of Airspace:	Class G

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Airport Information

Airport:		Runway Surface Type:	
Airport Elevation:	0 ft msl	Runway Surface Condition:	
Runway Used:	0	IFR Approach:	None
Runway Length/Width:	0 ft / 0 ft	VFR Approach/Landing:	Forced landing

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor	Latitude, Longitude:	41.799182,-121.460441(est)

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Administrative Information

Investigator In Charge (IIC): Roche, Hugh
Additional Participating
Persons:

Original Publish Date: November 23, 1992

Last Revision Date:
Investigation Class: Class
Note:

Investigation Docket: https://data.ntsb.gov/Docket?ProjectID=26590

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, "accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person" (Title 49 Code of Federal Regulations section 831.4). Assignment of fault or legal liability is not relevant to the NTSB's statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 United States Code section 1154(b)). A factual report that may be admissible under 49 United States Code section 1154(b) is available here.

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